

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): Alok Srivstava	Date: October 6, 2008
Serial No.: 10/798,545	Group Art Unit: 2161
Filed: 3/11/2004	Examiner: Kim, Paul
Title: Method and Apparatus for Integrating Data from External Sources into a Database System	Confirmation No.: 6477

Commissioner for Patents
Alexandria, VA 22313-1450

RESPONSE UNDER 37 CFR 1.116

Dear Sir:

In response to the Final Office Action of 8/6/2008, Applicants submit the following:

Amendments to the Claims are reflected in the listing of claims which begins on page 2 of this paper.

Remarks/Arguments begin on page X of this paper.

DO NOT ENTER: /PK/

Amendment to the Claims:

Listing of the Claims:

1. (currently amended) A method of initiating a connection via a network for a streaming data item between a client for the streaming data item and a streaming data item server ~~for that contains~~ that contains the streaming data item, the client and the streaming data item server being accessible to each other via the network and the method comprising the steps ~~performed in a search server that is accessible to the client and the streaming server via the network~~ of:

receiving a specification of the streaming data item from the client via the network by a search server that is accessible to the client via the network;

using the specification by the search server to make a query on a database system that is accessible to the search server, the query returning a first identifier that identifies the streaming data item; and

providing the first identifier and a second identifier from the search server to the streaming data item server that contains the streaming data item, the second identifier identifying the client, and the first identifier and the second identifier are used by the streaming data item server to establish the connection with the client, wherein the connection does not run through the search server.

2. (original) The method of initiating a connection set forth in claim 1 wherein:
the client, the streaming data item server, and the search server communicate via the network using the HTTP protocol;

the first identifier is a URL for the streaming data item; and

the second identifier is a current IP address for the client.

3. (original) The method of initiating a connection set forth in claim 1 wherein:
the database system is an object relational database system that includes a table containing an object that represents the streaming data item,

an open method for the object is defined in the database system, the open method returning the first identifier; and

the database system responds to the query by executing the open method and returning the first identifier.

4. (original) The method of initiating a connection set forth in claim 3 wherein:
the client, the streaming data item server, and the search server communicate via the network using the HTTP protocol;

the first identifier is a URL for the streaming data item; and

the second identifier is a current IP address for the client.

5. (currently amended) Connection initiation apparatus that has access to a network whereto a streaming data item server that contains a streaming data item and a client for a streaming data item also have access, the connection initiation apparatus comprising:

a search server; and

a database system to which the search server has access,

the search server responding to a specification of the streaming data item received from the client by using the specification to make a query for the database system, the database system responding to the query by returning a first identifier that identifies the streaming data item and the search server thereupon providing the first identifier and a second identifier that identifies the client to the streaming data item server, the first and second identifiers are used by the streaming data item server to establish a connection for the streaming data item between the client and the streaming data item server that contains the streaming data item, wherein the connection does not run through the search server.

6. (original) The connection initiation apparatus set forth in claim 5 wherein:
the client, the streaming data item server, and the search server communicate via the network using the HTTP protocol; and

the first identifier is a URL for the streaming data item; and

the second identifier is a current IP address for the client.

7. (original) The connection initiation apparatus set forth in claim 5 wherein:

the database system is an object relational database system that includes a table containing an object that represents the streaming data item,

an open method for the object is defined in the database system, the open method returning the first identifier; and

the database system responds to the query by executing the open method and returning the first identifier.

8. (original) The connection initiation apparatus set forth in claim 7 wherein:

the client, the streaming data item server, and the search server communicate via the network using the HTTP protocol; and

the first identifier is a URL for the streaming data item; and

the second identifier is a current IP address for the client.

9. (currently amended) A method of establishing a connection via a network for a streaming data item between a client for the streaming data item and a streaming data item server ~~for that contains~~ the streaming data item, the client and the streaming data item server being accessible to each other via the network and the method comprising the steps performed in the streaming data item server of:

receiving via the network by the streaming data item server that contains the streaming data item a first identifier that identifies the streaming data item and a second identifier that identifies the client, the first and second identifiers being received from a search server that uses a specification of the streaming data item received from the client via the network to obtain the first identifier; and

using by the streaming data item server the first and second identifiers to establish the connection with the client, wherein the connection does not run through the search server.

10. (original) The method of establishing a connection set forth in claim 9 wherein;

the client, the streaming data item server, and the search server communicate via the network using the HTTP protocol;

the first identifier is a URL for the streaming data item; and
the second identifier is a current IP address for the client.

11. (original) The method of establishing a connection set forth in claim 9 wherein:

the search server further uses the specification to make a query on a database system that is accessible to the search server, the query returning the first identifier.

12. (original) The method of establishing a connection set forth in claim 11 wherein;

the client, the streaming data item server, and the search server communicate via the network using the HTTP protocol;

the first identifier is a URL for the streaming data item; and
the second identifier is a current IP address for the client.

13. (original) The method of establishing a connection set forth in claim 9 wherein:

the database system is an object relational database system that includes a table containing an object that represents the streaming data item,

an open method for the object is defined in the database system, the open method returning the first identifier; and

the database system responds to the query by executing the open method and returning the first identifier.

14. (original) The method of establishing a connection set forth in claim 13 wherein;

the client, the streaming data item server, and the search server communicate via the network using the HTTP protocol;

the first identifier is a URL for the streaming data item; and
the second identifier is a current IP address for the client.

15. (currently amended) Apparatus that establishes a connection, the apparatus having access to a network to which a client for a streaming data item and a search server also have access,

the apparatus that establishes a connection comprising:

a streaming data item server that contains and provides streaming data items to clients via the network; and

a receiver in the streaming data item server,
the receiver receiving a first identifier for the streaming data item and a second identifier for the client from the search server via the network, the search server using a specification of the streaming data item received from the client via the network to obtain the first identifier and the receiver providing the first identifier and the second identifier to the streaming data item server, the streaming data item server using the first identifier and the second identifier to establish a connection for the streaming data item between the client and the streaming data item server, wherein the connection does not run through the search server.

16. (original) The apparatus of claim 15 wherein:

the client, the streaming data item server, and the search server communicate via the network using the HTTP protocol;

the first identifier is a URL for the streaming data item; and

the second identifier is a current IP address for the client.

17. (original) The apparatus of claim 15 wherein:

the search server further uses the specification to make a query on a database system that is accessible to the search server, the query returning the first identifier.

18. (original) The apparatus of claim 17 wherein:

the client, the streaming data item server, and the search server communicate via the network using the HTTP protocol;

the first identifier is a URL for the streaming data item; and

the second identifier is a current IP address for the client.

19. (currently amended) A data storage device, characterized in that:
the data storage device contains code which when executed by a processor implements a method of initiating a connection via a network for a streaming data item between a client for the streaming data item and a streaming data item server ~~for that contains the~~ streaming data item, the client and the streaming data item server being accessible to each other via the network and the method comprising the steps ~~performed in a search server that is accessible to the client and the streaming server via the network~~ of:

receiving a specification of the streaming data item from the client via the network by a search server that is accessible to the client via the network;

using the specification by the search server to make a query on a database system that is accessible to the search server, the query returning a first identifier that identifies the streaming data item;

providing the first identifier and a second identifier from the search server to the streaming data item server that contains the streaming data item, the second identifier identifying the client and the first identifier and the second identifier are used by the streaming data item server to establish the connection with the client, wherein the connection does not run through the search server.

20. (original) The data storage device set forth in claim 19 further characterized in that:

the client, the streaming data item server, and the search server communicate via the network using the HTTP protocol;

the first identifier is a URL for the streaming data item; and

the second identifier is a current IP address for the client.

21. (original) The data storage device set forth in claim 19 further characterized in that:

the database system is an object relational database system that includes a table containing an object that represents the streaming data item,

an open method for the object is defined in the database system, the open method returning the first identifier; and

the database system responds to the query by executing the open method and returning the first identifier.

22. (original) The data storage device set forth in claim 21 further characterized in that:

the client, the streaming data item server, and the search server communicate via the network using the HTTP protocol;

the first identifier is a URL for the streaming data item; and

the second identifier is a current IP address for the client.

23. (currently amended) A data storage device, characterized in that:
the data storage device contains code which when executed by a processor implements a method of establishing a connection via a network for a streaming data item between a client for the streaming data item and a streaming data item server for that contains the streaming data item, the client and the streaming data item server being accessible to each other via the network and the method comprising the steps ~~performed in the streaming data item server~~ of:

receiving via the network by the streaming data item server that contains the streaming data item a first identifier that identifies the streaming data item and a second identifier that identifies the client, the first and second identifiers being received from a search server that uses a specification of the streaming data item received from the client via the network to obtain the first identifier; and

using by the streaming data item server the first and second identifiers to establish the connection with the client, wherein the connection does not run through the search server.

24. (original) The data storage device set forth in claim 23 further characterized in that:

the client, the streaming data item server, and the search server communicate via the network using the HTTP protocol;

the first identifier is a URL for the streaming data item; and

the second identifier is a current IP address for the client.

25. (original) The data storage device set forth in claim 23 further characterized in that:

the search server further uses the specification to make a query on a database system that is accessible to the search server, the query returning the first identifier.

26. (original) The data storage device set forth in claim 25 further characterized in that:

the client, the streaming data item server, and the search server communicate via the network using the HTTP protocol;

the first identifier is a URL for the streaming data item; and

the second identifier is a current IP address for the client.

27. (original) The data storage device set forth in claim 23 further characterized in that:

the database system is an object relational database system that includes a table containing an object that represents the streaming data item,

an open method for the object is defined in the database system, the open method returning the first identifier; and

the database system responds to the query by executing the open method and returning the first identifier.

28. (original) The data storage device set forth in claim 27 further characterized in that:

the client, the streaming data item server, and the search server communicate via the network using the HTTP protocol;

the first identifier is a URL for the streaming data item; and

the second identifier is a current IP address for the client.

REMARKS/ARGUMENTS

This Amendment is in response to the Final Office Action dated 8/6/2008. Claims 1-28 are pending. Claims 1-28 are rejected. Claims 1, 5, 9, 15, 19, and 23 have been amended. No claims have been added or cancelled. Accordingly, claims 1-28 remain pending in the present application.

Claim amendments

Claims 1, 5, 9, 15, 19, and 23 have been amended to recite that the first and the second identifiers are provided from the search server to the streaming data item server that contains the streaming data item, the first identifier and the second identifier are used by the streaming data item server to establish the connection with the client, wherein the connection does not run through the search server. The amendments to the claims are specifically supported by the Specification at p. 23, line 28 – p. 24, line 8.

Rejection under 35 USC 103(a)

Claims 1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, and 27 are rejected under 35 USC 103(a) as being unpatentable over Levy (5,995,961) in view of Tene (6,928,463). Applicant respectfully disagrees as to the claims as amended.

The present application is a divisional of U.S. patent application 09/429,839

Per claim 1, the search server has access to a database system. The search server receives a specification of the streaming data item from the client, uses the specification in a query to obtain a first identifier that identifies the streaming data item. The search server then provides the first identifier and a second identifier that identifies the client to the streaming data item server. The streaming data item server then uses the first and second identifiers to establish the connection between the streaming data item server and the client, where the connection does not run through the search server.

Since the connection does not run through the search server, any delivery of the streaming data item from the streaming data item server to the client also does not run through the search server. The search server thus assists in the delivery of the streaming data item by providing the first and second identifiers to the streaming data item server, but does not participate in the actual delivery. The search server essentially “steps aside” and avoids the necessity of running the streaming data connection through the database system (see Specification from p. 23, line 4 through p. 24, line 8).

Levy discloses an execution engine which executes a plan for combining answers to a user query from different information sources. Levy discloses an execution engine 115 that executes a query plan generated by the plan generator 114. The query plan defines how information from various information sources can be combined in a way that guarantees semantically correct answers. (col. 10, lines 44-67) As illustrated in Fig. 1 of Levy, the execution engine 115 gathers the answers from different information sources 140 over the Internet 130. The execution engine 115 then combines the answers according to the query plan and provides them to the user via the user interface 101. (See also col. 10, lines 54 – 67.)

Levy thus discloses a system in which the connection between the user (client) and the information source (streaming data item server) goes through the execution engine (search server). This is in contrast to the invention as recited in amended independent claim 1, where the first identifier and the second identifier are used by the streaming data item server to establish the connection with the client, wherein the connection does not run through the search server. Since the execution engine executes the query plan, it cannot “step aside” in the same manner as a search server through which the connection is not run through.

For this reason, Levy does not teach or suggest the invention as recited in amended independent claim 1. Claim 1 is thus allowable over Levy.

Amended independent claims 5, 9, 15, 19, and 23 also recite a connection between the streaming data item server and the client, wherein the connection does not run through the search server. These claims are thus also allowable over Levy for at least the same reasons as claim 1.

Applicant submits that dependent claims 3, 7, 13, 21, and 27 are allowable because they depend upon these allowable base claims.

Rejection under 35 USC 103(a)

Claims 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, and 28 are rejected under 35 USC 103(a) as being unpatentable over Levy in view of Official Notice.

Applicant submits that claims 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, and 28 are patentable when read in combination with their respective independent claims 1, 5, 9, 15, 19, and 23. Applicant submits that these claims are allowable for at least the same

reasons as claims 1, 5, 9, 15, 19, and 23, set forth above.

Examiner's Response to Arguments

Applicant appreciates the Examiner's comments. Applicant submits that with the amendment of the claims, the Examiner's comments are now moot.

Conclusion

Accordingly, claims 1-28 are patentable over the cited references. Applicant respectfully requests reconsideration and passage to issue of claims 1-28 as now presented.

Applicants' attorney believes this application in condition for allowance. Should any unresolved issues remain, Examiner is invited to call Applicants' attorney at the telephone number indicated below.

Please charge any additional fees required for the amendment or refund any overpayments to deposit account number 501315.

Respectfully submitted,

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